

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 30833 Service: DTV Call WWBT Channel:

ID: Sign:

10 (High VHF) File **0000024806**

Number:

FRN: **0018223693** Date **01/22**

Submitted: /2021

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GRAY TELEVISION LICENSEE, LLC Doing Business As: WWBT	4370 PEACHTREE ROAD, NE ATLANTA, GA 30319 United States	+1 (804) 230-1212	allfcclms@gray. tv	Limited Liability Company

Reimbursement Contact Name and Information Reimbursement

Contact Information

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Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Fmail
Applicant	Addicas	I HOHE	Liliali

The Preparer is same as the reimbursement contact.

Broadcaster Information and Transition

Plan

Question Response

Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	Install side mount interim antenna, connect to existing transmission line Install new top mount Channel 10 antenna and new tx line Install new main and backup transmitters.

Transmitters	Section	Question	Response
	Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

Auxiliary Transmitter

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Emergency Backup
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	HTEL
	Year	2010
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	1.1 kW

Auxiliary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	VAXTE- 8R44
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	6.4 kW
	Justification for New Transmitter	Please see GatesAir quote Q- 73886

Auxiliary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A

HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary

Other Transmitter Cost Not Listed

Transmitter Information not provided.

Auxiliary Transmitter

Add Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Auxiliary (Backup)
	Description of Use	Alternate Main
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	TTS-30
	Year	2005
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	2.6 kW

Auxiliary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Auxiliary (Backup)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	VAXTE- 6R44
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	4.8 kW
	Justification for New Transmitter	Existing transmitter can not be efficiently and effectively retuned. Station will buy 1 new transmitter to replace one main and one aux.

Auxiliary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	150 kVA

	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary

Other Transmitter Cost Not Listed

Transmitter Information not provided.

Primary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	TTS30
	Year	2005
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	2.6 kW

Primary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Manufacturer	
	Model	VAXTE- 8R37
	Transmitter Type	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power capacity	6.4 kW
	Justification for New Transmitter	Existing transmitter can not be efficiently and effectively retuned. Station will buy 1 new transmitter to replace one main and one aux.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	150 kVA

	Rigid Conduit and Wiring	No
	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	Remove and dispose of old wiring, conduit, disconnects, voltage regulator, bypass switch, and other electrical services.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Heating and Cooling
	Size	10 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Name	Description

	_			
Intornal	Iraner	MICCIAN	I ina	Installation

internal line required due to repack

Antennas

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna Manufacturer and Type	Class	Full Power
	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Other
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	Traveling Wave
	ERP: (Effective Radiated Power)	26.0 kW

Manufacturer	
Model	DIELECTRIC TW-12B12-R
Year	2005

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Types	Mounting	Top Mount
	Antenna position in stack	Not in Stack
	Polarization	Elliptical
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	26.0 kW
	Manufacturer	
		,

Model	THV-10A10
	/VP-R 04
	/ / / - 1 \ 04
Year	2019
Justification for New Antenna	Existing
	antenna is
	not re-
	tunable
	Quote
	attached E-
	Pol premium
	is not
	reimbursable
	Estimated
	tax and
	shipping
	included in
	cost

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	Туре	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	3 1/8 inches inches

Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Other Antenna Cost Not Listed

Name	Description
Primary Antenna Mounting Adapter	Primary Antenna Mounting Adapter

Interim Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	Yes
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	26.0 kW
	Manufacturer	
	Model	TLS-V4-BB
	Year	2019

Justification for New Antenna	Interim
	during main
	antenna
	change

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	No
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission	Section	Question	Response
Line	Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Existing Transmission Line

Primary Transmission_S Line

Section	Question	Response
Existing Transmission Line Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission	Manufacturer	
Line Manufacturer and Type	Туре	Rigid
	Diameter	6 1/8 inches
	Other Diameter	N/A
	Segment Length	20 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	850 feet per run

New Transmission Line

Primary
Transmission_s
Line

Section	Question	Response
New Transmission Line Costs	Use	Primary (Main)
	Description of Use	N/A
	Change Type	Purchase New
	Is this a request for upgraded equipment?	No
	Туре	Rigid
	Diameter	4 1/16 inches
	Other Diameter	N/A
	Segment Length	19 1/2 inches
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	820 feet per run
	Justification for New Transmission Line	Existing line is not specified for new channel Replacing 6" with 4 1 /16"

Other Transmission Line Expenses Not Listed

Primary
Transmission not provided.

Line

New Transmission Line

Interim	New Transmission Line			
Transmissio Line	n _{Section}	Question	Response	
Lino	New Transmission Line Costs	Use	Interim	
		Description of Use	N/A	
		Change Type	Purchase New	
		Туре	Flexible Air	
		Diameter	1 5/8 inches	
		Segment Length	N/A	
	Other Segm	Other Segment Length		
		Number of parallel runs	1	
		Length	20 feet per run	
		Justification for New Transmission Line	20' of transmission line needed to connect existing transmission line to interim antenna	

Other Transmission Line Expenses Not Listed Interim **Transmission** nformation not provided. Line

Tower Equipment And Rigging Costs

Section	Question	Response
Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

Primary Tower

Existing Tower

Section	Question	Response
Existing Tower Description	Type of change	Modify Existing
	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	No
	One or more FM, AM or TV radio broadcaster(s)	N/A
	Others Types of Users	N/A
	Is tower documented for structural analysis?	Yes
	Is tower compliant with Rev G?	No
Existing Tower Structure	Do you have a tower registration number?	Yes
Registration	ASR Number	1015246
Coordinates (NAD83 (North American Datum of	Latitude (NAD83)	37° 30' 23.0" N-
1983))	Longitude (NAD83)	077° 30' 11.0" W-
	Overall Structure Height	791.99 fee
	Support Structure Height	716.85 fee
	Ground Elevation Above Mean Sea Level (AMSL)	210.96 fee

Structure Type	TOWER - Free Standing or Guyed Structure
Tower Owner	WWBT, Inc.
Date Constructed	04/01/1956

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Minor Reinforcements needed

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A
Helicopter Services Required	Are helicopter services required?	Yes

Primary Tower

Other Tower Expenses Not Listed

Information not provided.

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	895
	Explanation	Pattern analysis Antenna Spec Transmitter Spec Building drawings Installation Supervision Accounting Internal Legal 399 Preparation
Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A

Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	No
	Address transition timing and coordination issues w/ other stations and wireless providers	No
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	No
	Additional Field Engineering Service	Yes
	Number of Days	2
	Justification	Transmission line routing and planning.

Other Professional Services Expenses Not Listed

Outside
Professional Information not provided.
Services
Costs

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	Yes
	FCC Special Temporary Authority Application	No
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses Not Listed

Expenses Information not provided.

Cost Information

Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter VAXTE-8R37	\$439,449.27	\$328,093.42		\$83,219.91	
Other Electrical Service: Remove and dispose of old wiring, conduit, disconnects, voltage regulator, bypass switch, and other electrical services.	\$6,895.00	\$6,895.00	Please see Hill Electrical, Inc. quote dated April 1, 2019	N/A	N/A

High VHF - Air Cooled Solid State Transmitter 6.4 kW	\$137,154.51	\$137,154.51	Please see attached GatesAir Quotes Q-81028 and GA-00021668 and Change Order Q-86287, plus actual shipping on invoice US0334829 (\$178,153.92), less the amount already reimbursed on two locked and superseded categories (\$40,999.41)	\$0.00	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
10 Ton system	\$60,500.00	\$80,194.50	see Estimated Cost Justification WWBT-110- 1st Primary Transmitter - HVAC v0	\$39,970.50	N/A
Internal Transmission Line Installation	\$2,250.00	\$2,250.00	Please see WWBT Primary Transmitter - Other Expenses - Internal Transmission Line Installation Budget Revision Justification Letter	\$2,250.00	N/A

Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
High VHF - Air Cooled Solid State Transmitter 4.8 kW	\$16,399.76	\$16,399.76	***System Notice: Estimate adjusted and locked because line has been superseded. ***Per Gatesair quote GA- 00021476	\$16,399.76	N/A
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	\$152,500.00	\$24,599.65	***System Notice: Estimate adjusted and locked because line has been superseded. ***Quote attached Headroom analysis attached	\$24,599.65	N/A
Auxiliary Transmitter VAXTE-8R44	\$253,342.62	\$113,088.23		\$85,505.95	
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$10,000.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$7,000.00	N/A	N/A	N/A

High VHF - Air Cooled Solid State Transmitter 6.4 kW	\$37,092.62	\$37,092.62	Please see attached GatesAir Quotes GA-00021684 and Q-73886 and Change Order Q-75542 (\$96,088.23), less the amount already reimbursed on locked and superseded category (\$58,995.61).	\$26,510.34	N/A
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	\$152,500.00	\$58,995.61	***System Notice: Estimate adjusted and locked because line has been superseded. ***Quote attached	\$58,995.61	N/A
Auxiliary Transmitter VAXTE-6R44	\$63,750.00	\$0.00		\$0.00	
Transformer 3 phase /480v - 150	\$25,550.00	\$0.00	Not required	N/A	N/A
KVA					
High VHF - Air Cooled Solid State Transmitter 4.8 kW	\$0.00	\$0.00	Station is installing one main to replace existing main and 1 aux	N/A	N/A
High VHF - Air Cooled Solid State Transmitter	<i>\$0.00</i> \$38,200.00	\$0.00 \$0.00	installing one main to replace existing main	N/A	N/A

Total for all	\$2,130,156.03	\$1,912,440.61	N/A	\$1,324,350.63	N/A
systems					

Components

Actual Information Description	File Name	
Other Electrical Service: Remove and dispose of old wiring, conduit, disconnects, voltage regulator, bypass switch, and other electrical services.	Information not provided.	
High VHF - Air Cooled Solid State Transmitter 6.4 kW	Component Description: Amount:	A. Transmitter \$81,622.17
	Component Description: Amount:	VAXTE-6R37 \$17,358.67
	Component Description: Amount:	VAXTE-6R37 \$29,611.30
Switchgear - industrial 800 amp	Information not provided.	

10 Ton system		
	Component Description:	INSTALL (2) CARRIER 10 TON PACKAGE A/C
	Amount:	UNITS \$27,979.00
	Component Description: Amount:	Credit Memo (\$39,970.50)
	Component Description:	Base Contract Amount Install (2) Carrier 10 TON
	Amount:	\$51,962.00
	Component Description: Amount:	Invoice Non Reimburseable N/A
Internal Transmission Line Installation	Component Description:	WWBT-110-1st Primary Transmitter - Internal
	Amount:	Transmission Line \$2,250.00
Transformer 3 phase/480v - 150 KVA	Information not provided.	
High VHF - Air Cooled Solid State Transmitter 4.8 kW	Component Description: Amount:	VAXTE-6 \$16,399.76
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	Component Description: Amount:	VAXTE-6 \$24,599.65
Transformer 3 phase/480v - 150 KVA	Information not provided.	

Switchgear - industrial 800 amp	Information not provided.	
High VHF - Air Cooled Solid State Transmitter 6.4 kW	Component Description: Amount:	VAXTE-2 \$13,019.23
	Component Description: Amount:	VAXTE-2 \$13,491.11
High VHF - Air Cooled Solid State Transmitter 1.1 . 4.4 kW	Component Description: Amount:	A. Transmitter \$39,949.09
	Component Description:	VAXTE-2 per quote GA- 00021476
	Amount:	\$7,618.61
	Component Description: Amount:	VAXTE-2 Transmitter \$11,427.91
Transformer 3 phase/480v - 150 KVA	Information not provided.	
High VHF - Air Cooled Solid State Transmitter 4.8 kW	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	

Cost Information

Antennas

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna TLS-V4-BB	\$72,051.00	\$71,721.00		\$5,832.34	
Sweep test of existing antenna	\$6,730.00	\$6,400.00	Please see Dielectric Order Confirmation 183001	N/A	N/A
High VHF - High Power Side Mount One Station horizontally polarized	\$65,321.00	\$65,321.00	Please see Dielectric Order Confirmation 183001	\$5,832.34	N/A
Primary Antenna THV-10A10 /VP-R 04	\$311,842.00	\$310,497.00		\$272,700.00	
Primary Antenna Mounting Adapter	\$20,175.00	\$20,175.00	Please see Dielectric Order Confirmation 82001	\$20,175.00	N/A
Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed)	\$7,600.00	\$6,585.00	Please see Dielectric Order Confirmation 82001	\$6,585.00	N/A

Sweep test of existing antenna	\$6,730.00	\$6,400.00	Please see Dielectric Order Confirmation 82001	\$5,760.00	N/A
High VHF - High Power Top Mount One Station elliptically or circularly polarized	\$277,337.00	\$277,337.00	Quote attached Estimated tax and shipping included in cost V-Pol premium not included in cost	\$240,180.00	N/A
Sub-total	\$383,893.00	\$382,218.00	N/A	\$278,532.34	N/A
Total for all systems	\$2,130,156.03	\$1,912,440.61	N/A	\$1,324,350.63	N/A

Components

File Name	
Information not provided.	
Component Description: Amount:	Interim antenna \$5,832.34
Component Description: Amount:	WWBT-210- Primary Antenna - Mounting Adapter \$10,087.50
Component Description:	WWBT-210- Primary Antenna - Mounting Adapter
	Information not provided. Component Description: Amount: Component Description: Amount:

Elbow complex, single channel, at antenna input, WWBT-210-**Component Description:** per 3 1/8. feedline (if needed) Primary Antenna -**Elbow Complex** \$1,646.25 Amount: WWBT-210-**Component Description:** Primary Antenna -**Elbow Complex Amount:** \$1,646.25 WWBT-210-**Component Description:** Primary Antenna -**Elbow Complex** Amount: \$3,292.50 Sweep test of existing antenna **Component Description:** Invoice moved to correct budget category **Amount:** N/A **Component Description:** WWBT-210-Primary Antenna -Sweep Test Amount: \$1,600.00 WWBT-210-**Component Description:** Primary Antenna -Sweep Test \$3,200.00 **Amount: Component Description:** OTHER WWBT -**INCLUDES ONE** FIELD ENGINEER Amount: \$960.00

High VHF - High Power Top Mount One Station elliptically or circularly polarized

Component Description:

Amount:

Antenna \$34,642.77

Component Description:

HIGH-VHF 10A10 /VP-R 04 CH10 WWBT ONE STATION, TOP

MOUNT

Amount: \$120,090.00

Component Description: HIGH-VHF One

station antenna

Amount: \$60,045.00

Component Description:

Amount:

Primary antenna

\$25,402.23

Cost Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Transmission Line	\$660.00	\$4,723.53		\$0.00	
Flexible Air Transmission Line - dielectric, 1 5 /8"	\$660.00	\$4,723.53	Please see Dielectric Order Confirmation 183001	N/A	N/A
Primary Transmission Line	\$116,440.00	\$92,073.22		\$92,073.22	
Rigid Transmission Line - copper, 4 1 /16"	\$116,440.00	\$92,073.22	See Estimated Cost Justification WWBT-310- Primary Transmission Line - Rigid, Copper V1	\$92,073.22	N/A
Sub-total	\$117,100.00	\$96,796.75	N/A	\$92,073.22	N/A
Total for all systems	\$2,130,156.03	\$1,912,440.61	N/A	\$1,324,350.63	N/A

Components

Actual Information Description	File Name
Flexible Air Transmission Line - dielectric, 1 5/8"	Information not provided.
Rigid Transmission Line - copper, 4 1/16"	

Component Description: WWBT-310-

Primary

Transmission Line
- Rigid, Copper, 4 1

/16"

Amount: \$13,190.31

Component Description: WWBT-310-

Primary

Transmission Line
- Rigid, Copper, 4 1

/16"

Amount: \$42,751.12

Component Description: Primary

Transmission Line

Components

Amount: \$8,464.50

Component Description: Reducer 4-50

Amount: \$4,549.73

Component Description: REDUCER 4-50

EIA X 3-50 EIA

STD "QS"

Amount: \$992.00

Component Description: MODIFY SECTION

OF 6 1/8

UNIVERSAL EA

OUTER

CONDUCTOR BY ADDING 6 1/8 EIA

FLANGE

Amount: \$750.00

Component Description: WWBT-310-

Primary

Transmission Line
- Rigid, Copper, 4 1

/16"

Amount: \$21,375.56

Cost Information

Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower TOWER	\$524,850.00	\$654,908.07		\$607,058.07	
Tower Helicopter Lift	\$143,750.00	\$143,750.00	Please see WWBT Tower King Proposal C19_008	\$143,750.00	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$16,525.00	See WWBT-410- Existing Primary Tower - Tower Load Study Estimated Cost Justification v0	\$16,525.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$344,633.07	see Estimated Cost Justification WWBT-410- Existing Primary Tower - Tower Rigging, Tall Tower V2	\$344,633.07	N/A
Minor tower reinforcement /modifications	\$158,000.00	\$150,000.00	N/A	\$102,150.00	N/A
Sub-total	\$524,850.00	\$654,908.07	N/A	\$607,058.07	N/A

Total for all	\$2,130,156.03	\$1,912,440.61	N/A	\$1,324,350.63	N/A
systems					

Components

Actual Information Description	File Name	
Tower Helicopter Lift		
, , , , , , , , , , , , , , , , , , ,	Component Description:	WWBT-410- Existing Primary Tower - Helicopter Lift
	Amount:	\$111,591.16
	Component Description:	WWBT-410- Existing Primary Tower - Helicopter
	Amount:	Lift \$32,158.84
Structural engineering tower		
load study for well documented tower	Component Description:	Tower Structural Analysis on
	Amount:	WWBT tower \$7,400.00
		T. O
	Component Description:	Tower Structural Analysis
	Amount:	\$8,500.00
	Component Description:	WWBT-410-
		Existing Primary Tower - Tower
	Amount:	Load Study \$625.00

Tall Tower (greater than 500')

Component Description: WWBT-410-

Existing Primary
Tower - Tower

Rigging, Tall Tower

Amount: \$2,383.07

Component Description: TOWER SERVICE

Amount: \$235,408.84

Component Description: Tower Service

Amount: \$67,841.16

Component Description: WWBT-410-

Existing Primary
Tower - Tower

Rigging, Tall Tower

Amount: \$39,000.00

Minor tower reinforcement /modifications

Component Description: Provide,

Construction

Drawings, Material

Fabrication

Amount: \$13,850.00

Component Description: A) 50 % Upon

Acceptance of

\$39,000.00

Order

Amount: \$22,462.50

Component Description: TOWER SERVICE

Amount:

Component Description: "Re:19-0145

WWBT's 722 ft.
Guyed Tower
(Engineering
Support During
Construction)
Richmond, VA"

Amount: \$7,487.50

Component Description: In-depth Physical

Inspection

Amount: \$5,500.00

Component Description: Re: 20-0087 722 ft

8.25 ft-face Guyed material for Tower

Modification

Amount: \$13,850.00

Cost Information

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description Outside Professional Services	Predetermined Cost Estimate \$252,225.88	Estimated Cost \$249,590.88	Estimated Cost Justification	Actual Cost \$115,992.13	Actual Cost Justification
Additional Field Engineering Service, 2 Days	\$1,165.88	\$1,165.88	Please see WWBT RF Eng- Additional Field Service Budget Justification Letter	\$1,165.88	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	\$332.00	N/A

Attomey Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application \$5,260.00 \$5,000.00 N/A <						
request for Special Temporary Authorization Prepare engineering section of FCC Form 2100 (main), License to Cover Application \$1,580.00 \$1,500.00 N/A N/A N/A N/A Prepare engineering section of FCC Form 2100 (main), License to Cover Application \$3,155.00 \$3,000.00 N/A \$2,750.00 N/A Perpare engineering section of FCC Form 2100 (main), Construction Permit Application \$7,360.00 \$7,000.00 N/A \$3,175.00 N/A Perform engineering study for new channel assignment and antenna development \$141,410.00 \$144,675.00 Widelity Strategic Support Quote \$108,569.25 N/A Sub-total \$252,225.88 \$249,590.88 N/A \$115,992.13 N/A Total for all \$2,130,156.03 \$1,912,440.61 N/A \$1,324,350.63 N/A	Prepare and File FCC Form 2100 (main), Construction Permit	\$5,260.00	\$5,000.00	N/A	N/A	N/A
engineering section of FCC Form 2100 (main), License to Cover Application \$3,155.00 \$3,000.00 N/A \$2,750.00 N/A Prepare engineering section of FCC Form 2100 (main), Construction Permit Application \$7,360.00 \$7,000.00 N/A \$3,175.00 N/A Perform engineering study for new channel assignment and antenna development \$141,410.00 \$144,675.00 Widelity Strategic Support Quote \$108,569.25 N/A Sub-total \$252,225.88 \$249,590.88 N/A \$115,992.13 N/A Total for all \$2,130,156.03 \$1,912,440.61 N/A \$1,324,350.63 N/A	request for Special Temporary	\$2,050.00	\$1,500.00	N/A	N/A	N/A
engineering section of FCC Form 2100 (main), Construction Permit Application Perform \$7,360.00 \$7,000.00 N/A \$3,175.00 N/A engineering study for new channel assignment and antenna development Project \$141,410.00 \$144,675.00 Widelity Strategic Support Quote Sub-total \$252,225.88 \$249,590.88 N/A \$115,992.13 N/A	engineering section of FCC Form 2100 (main), License to Cover	\$1,580.00	\$1,500.00	N/A	N/A	N/A
engineering study for new channel assignment and antenna development \$141,410.00 \$144,675.00 Widelity Strategic Support Quote \$108,569.25 N/A Sub-total \$252,225.88 \$249,590.88 N/A \$115,992.13 N/A Total for all \$2,130,156.03 \$1,912,440.61 N/A \$1,324,350.63 N/A	engineering section of FCC Form 2100 (main), Construction Permit	\$3,155.00	\$3,000.00	N/A	\$2,750.00	N/A
management of the transition Strategic Support Quote Sub-total \$252,225.88 \$249,590.88 N/A \$115,992.13 N/A Total for all \$2,130,156.03 \$1,912,440.61 N/A \$1,324,350.63 N/A	engineering study for new channel assignment and antenna	\$7,360.00	\$7,000.00	N/A	\$3,175.00	N/A
Total for all \$2,130,156.03 \$1,912,440.61 N/A \$1,324,350.63 N/A	management of	\$141,410.00	\$144,675.00	Strategic Support	\$108,569.25	N/A
	Sub-total	\$252,225.88	\$249,590.88	N/A	\$115,992.13	N/A
		\$2,130,156.03	\$1,912,440.61	N/A	\$1,324,350.63	N/A

Actual Information Description	File Name	
Additional Field Engineering Service, 2 Days	Component Description: Amount:	Site tx line routing and planning \$1,165.88
Comprehensive coverage verification via field study, if needed	Information not provided.	
Attorney Fees - Prepare and File request for Special Temporary Authorization	Information not provided.	
Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application	Component Description: Amount:	For Professional Services Rendered \$332.00
Attorney Fees - Prepare and File FCC Form 2100	Information not provided.	
(main), Construction Permit Application		
,	Information not provided.	
Application Prepare request for Special	Information not provided. Information not provided.	

Perform engineering study for new channel assignment and antenna development

Component Description: WWBT-530-RF

Eng - Engineering Study for New

Channel Assignment

Amount: \$2,400.00

Component Description: Engineering study

work for new channel

assignment and

antenna

development.

Amount: \$500.00

Component Description: Engineering study

work for new channel

assignment and

antenna development.

Amount: \$125.00

Component Description: Consulting

Engineer

Amount: \$150.00

Project management of the transition

Component Description: Project

Management

Amount: \$43.63

Component Description: Project

Management

Amount: \$6,484.20

Component Description: Project

Management

Amount: \$192.50

Amount:

Project

Management \$2,045.45

Component Description:

Project

Amount:

Management \$141.16

Component Description:

Project

Amount:

Management \$2,071.95

Component Description:

Project

Amount:

Management \$6,979.30

Component Description:

Project

Amount:

Management

\$770.00

Component Description:

Project

Amount:

Management

\$8,961.60

Component Description:

Project

Amount:

Management \$2,675.65

Component Description:

Project

Amount:

Management

\$2,785.75

Component Description:

Amount:

Travel

\$84.70

Project Management

Amount:

\$4,604.55

Component Description:

Project

Amount:

management \$2,492.75

Component Description:

Project

Amount:

Management \$3,298.25

Component Description:

Project

Amount:

Management \$2,909.80

Component Description:

Project

Amount:

Management \$2,727.15

Component Description:

Project

Amount:

Management

\$2,615.15

Component Description:

Project

Amount:

Management

\$3,103.15

Component Description:

Project

Amount:

Management

\$2,264.95

Component Description:

Project

Amount:

Management

\$28.23

Amount:

Project

Management \$2,247.20

Component Description:

Project

Amount:

management \$5,616.00

Component Description:

Project

Amount:

Management \$14,307.40

Component Description:

Project

Amount:

Management \$205.32

Component Description:

Project

Amount:

Management

\$3,015.35

Component Description:

Project

Amount:

Management

\$500.50

Component Description:

Project

Amount:

Management \$2,835.90

Component Description:

Project

Amount:

Management

\$38.50

Component Description:

Project

Amount:

Management

\$177.10

Component Description: Project

Management

Amount:

\$3,449.95

Component Description:

Project

Amount:

\$112.92

Management

Component Description:

Project

Amount:

Management \$3,401.30

Component Description:

Project

Amount:

Management \$3,962.65

Component Description:

Project

Amount:

Management \$3,422.50

Component Description:

Project

Amount:

Management \$2,355.85

Component Description:

Project

Management

Amount:

\$297.74

Component Description:

Project Management

Amount:

\$4,003.70

Component Description:

Repack Engineering

Amount:

\$1,339.50

Cost Information

Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cos
Other Expenses	\$95,545.26	\$87,745.26		\$61,969.01	
MVPD Notification of Channel Change	<i>\$2,065.70</i>	\$2,065.70	see Estimated Cost Justification WWBT-610- MVPD Notification v0	\$2,065.70	N/A
Develop and air announcement of upcoming channel change	<i>\$2,850.00</i>	\$2,850.00	estimate for on air rescan announcement production Quote attached	N/A	N/A
Equipment Storage	\$30,500.00	\$30,500.00	Estimate for Dielectric on site antenna storage Dielectric letter attached	\$9,430.00	N/A
DTV Medical Facility Notification	\$11,550.00	\$3,750.00	Group quote attached	\$3,750.00	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$335.00	Please see WWBT Filing Fees- License to Cover Budget Justification Cover Letter	\$335.00	N/A

Equipment Delivery and Handling Charges	\$47,481.23	\$47,481.23	see Estimated Cost Justification WWBT-610- Equipment Delivery and Handling v6	\$45,624.98	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	<i>\$763.33</i>	\$763.33	Please see Estimated Cost Justification WWBT-610- Disposal v0	\$763.33	N/A
Sub-total	\$95,545.26	\$87,745.26	N/A	\$61,969.01	N/A
Total for all systems	\$2,130,156.03	\$1,912,440.61	N/A	\$1,324,350.63	N/A

Components

Actual Information Description	File Name	
MVPD Notification of Channel Change	Component Description: Amount:	Total Professional Services \$2,065.70
Develop and air announcement of upcoming channel change	Information not provided.	
Equipment Storage	Component Description: Amount:	WWBT-610- Equipment Storage \$9,430.00
DTV Medical Facility Notification	Component Description: Amount:	Medical Notification \$3,750.00

FCC Filing Fees - Form 2100 license to cover application	Component Description: Amount:	WWBT-610-FCC Filing Fees - License to Cover \$335.00
	Amount	ψοσο.σσ
Equipment Delivery and		
Handling Charges	Component Description:	IOK 42'-48'
		SHOOTING BOOM
		FORKLIFT
	Amount:	\$4,906.11
	Component Description:	12K 55' SHOOTING
		BOOM FORKLIFT
	Amount:	\$2,950.64
	Component Description:	8K-9K 42' Shooting
	Component Description.	Boom Forklift
	Amount:	\$1,105.43
	Component Description:	FREIGHT AND
	Amount	SHIPPING
	Amount:	\$921.98
	Component Description:	FREIGHT AND
		SHIPPING
	Amount:	\$9,812.07
	Component Description:	10k 55' Shooting
	Amount:	Boom Forklift \$6,636.78
	Amount.	φυ,σου. <i>1</i> ο
	Component Description:	10K 55' SHOOTING
	,	DOOM FORKLIET

Amount:

BOOM FORKLIFT

\$5,858.19

Amount:

Freight and shipping

\$594.77

Component Description: CHESTERFIELD

SHORT TERM RENTAL TAX

Amount: \$1,876.03

Component Description:

Amount:

Freight and Shipping

\$2,043.18

Component Description: Shooting Boom

Forklift

Amount: \$4,679.14

Component Description: WWBT-610-

Equipment Delivery

and Handling

Amount: \$2,383.08

Component Description: 6k-7k 42' Shooting

Boom Forklift \$1,857.58

Amount:

Disposal Costs (for equipment and other waste, net of any salvage value)

Component Description:

Amount:

Final 20 CYD

\$325.00

Component Description:

Amount:

Rent CY20

\$338.33

Component Description:

Amount:

Delivery 20 CYD

\$100.00

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$2,130,156.03	\$1,912,440.61	\$1,324,350.63

Reimbursem	envestion	Response
Status	The facility has ceased operating on its pre- auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399	No

from further editing and begin close-out procedures with the Fund Administrator.

Section Question Response

Submission of Estimated Expenses Statements

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.

- 1. The Authorized
 Person signing
 below certifies that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Robert Folliard , III

Assistant Secretary

01/22/2021

Section Question Response

Submission of Actual Cost Documentation Statements

WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).

- 1. The Authorized
 Person signing
 below certifies and
 represents that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Robert Folliard , III

Assistant Secretary

01/22/2021

Attachments